

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-14 (canceled).

1 Claim 15 (currently amended): A method for protecting a
2 portable card, provided with a cryptographic algorithm for
3 enciphering data and/or authenticating the card, against
4 deriving a secret key used in the card from statistical
5 analysis of information leaking away from the card to an
6 outside world in the event of cryptographic operations
7 performed by the card, the card being provided with at least
8 a shift register having linear and non-linear feedback
9 functions for implementing cryptographic algorithms, the
10 method comprising the steps of:

11 loading data to be processed and a secret key into the
12 shift register of the card; and

13 controlling the linear and non-linear feedback
14 functions separately from each other in such a manner that
15 collection of values of recorded leak-information signals is
16 resistant to deriving the secret key through said
17 statistical analysis of the values.

1 Claim 16 (previously presented): The method recited in
2 claim 15 wherein said manner comprises invoking the linear
3 and non-linear feedback functions in a predefined sequence.

1 Claim 17 (previously presented): The method recited in
2 claim 15 wherein the information leaking away to the outside
3 world comprises either power-consumption data or
4 electromagnetic radiation.

1 Claim 18 (previously presented): The method recited in
2 claim 15 further comprising the steps of:
3 after the key has been loaded into the shift register,
4 clocking the shift register several times, during a specific
5 period, using at least the linear-feedback function;
6 then loading data into the shift register only using
7 the linear-feedback function; and
8 subsequently clocking the shift register.

1 Claim 19 (previously presented): The method recited in
2 claim 18 further comprising the step of:
3 during a first instance of clocking the shift register,
4 clocking the shift register for a sufficiently long time
5 such that the contents of all elements of the shift register
6 largely depend on bits of the key.

1 Claim 20 (previously presented): The method recited in
2 claim 18 further comprising the steps of:
3 after the key has been loaded into the shift register,
4 disconnecting the data from an input to the shift register;
5 and
6 after the specific period has occurred, reconnecting
7 the data to the input of the shift register so that the data
8 can then be loaded into the shift register.

1 Claim 21 (previously presented): The method recited in
2 claim 15 further comprising the step of:

3 after the key has been loaded into the shift register,
4 clocking the shift register, during a specific period,
5 several times, with the linear and non-linear feedback
6 functions of the shift register being active but no data
7 being loaded into the shift register during or prior to the
8 clocking or prior to loading the key.

1 Claim 22 (previously presented): The method recited in
2 claim 21 further comprising the steps of:

3 after the key has been loaded into the shift register,
4 disconnecting the data from an input to the shift register;
5 and

6 after the specific period has occurred, reconnecting
7 the data to the input to the shift register so that the data
8 can then be loaded into the shift register.

1 Claim 23 (previously presented): The method recited in
2 claim 15 further comprising the step of:

3 loading the key into the shift register with both the
4 linear and non-linear functions being active and only when
5 the contents of the shift register are fixed.

1 Claim 24 (previously presented): The method recited in
2 claim 15 further comprising the steps of:

3 if the key is not been loaded into the shift register
4 while the contents of the shift register are fixed, loading
5 the key into the shift register using only the linear
6 feedback function; and

7 then clocking the shift register.